



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/900,063A
Source: 1600
Date Processed by STIC: 6/12/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>>, EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception-Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003

RECEIVED

JUN 19 2003

TECH CENTER 1600/2100



1600

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/900,063A

DATE: 06/12/2003
 TIME: 08:07:21

Input Set : A:\EP.txt
 Output Set: N:\CRF4\06122003\I900063A.raw

5 <110> APPLICANT: Rothschild, Max F.
 7 Vincent, Amy L.
 9 Tuggle, Christopher K.
 13 <120> TITLE OF INVENTION: PROLACTIN RECEPTOR GENE AS A GENETIC MARKER FOR INCREASED
 LITTER SIZE IN

14 ANIMALS
 18 <130> FILE REFERENCE: P02285UD5
 22 <140> CURRENT APPLICATION NUMBER: US 09/900,063A
 24 <141> CURRENT FILING DATE: 2001-07-06
 28 <150> PRIOR APPLICATION NUMBER: US 08/812,208
 30 <151> PRIOR FILING DATE: 1997-03-06
 34 <150> PRIOR APPLICATION NUMBER: US 08/742,805
 36 <151> PRIOR FILING DATE: 1996-11-01
 40 <150> PRIOR APPLICATION NUMBER: US 60/022,180
 42 <151> PRIOR FILING DATE: 1996-07-19
 46 <160> NUMBER OF SEQ ID NOS: 18
 50 <170> SOFTWARE: PatentIn version 3.1
 54 <200> SEQ ID NO: 1
 56 <211> LENGTH: 20
 58 <212> TYPE: DNA
 60 <213> ORGANISM: Porcine
 64 <400> SEQUENCE: 1
 65 cccaaaacag caggagaacg
 68 <210> SEQ ID NO: 2
 70 <211> LENGTH: 20
 72 <212> TYPE: DNA
 74 <213> ORGANISM: Porcine
 78 <400> SEQUENCE: 2
 79 ggcaagtggg tgaatatgga
 82 <210> SEQ ID NO: 3
 84 <211> LENGTH: 492
 86 <212> TYPE: DNA
 88 <213> ORGANISM: Porcine
 92 <220> FEATURE:
 94 <221> NAME/KEY: allele
 96 <222> LOCATION: (240)..(240)
 98 <223> OTHER INFORMATION: G/A polymorphic site
 102 <400> SEQUENCE: 3

Does Not Comply
 Corrected Diskette Needed

pp 1-4

20

20

103 aagtcacaa agatggagca ctggcggttc tccccaaaac gcaggagaaac ggccgaccggc 60
 105 cggagaaggc tggcgccctt gaaaccagca aggaatacgc ccaggtgtcc cggtgatgg 120
 107 ataaccacat cctggtgtta gtgcaggatc cgcgagctgc aaacgtggct ccgtttgaag 180
 109 aaccaaccaa ggagaccocg ccatcccgcc cgcagaatcc agctgcgaaa gacctggccg 240
 111 gcttcaccac ggccccgggc cactgcagac acccgctggg tgggttgat tacctcgatc 300
 113 cgcgaggctt tatgcactcc ttccagtgag agcttggttc atgggatgat ggggtacaag 360

per Sequence Rules, use 'r'
 $r = a \text{ or } g$

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Input Set : A:\EP.txt

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```

115 gtgggggtttt tttagcgtcg cactacgtga aatgcactct accagagaaa gtcgaaaaat 420
117 ggggttagaa tgacactacc cagactcaca gttcactcct ctctatgtgc cattttcaac 480
119 cacttgctct tt 492
122 <210> SEQ ID NO: 4
124 <211> LENGTH: 20
126 <212> TYPE: DNA
128 <213> ORGANISM: Unknown
132 <220> FEATURE:
134 <223> OTHER INFORMATION: Human and rabbit cDNA sequences encoding the prolactin
receptor
135 were used to design the degenerate primer
137 <220> FEATURE:
139 <221> NAME/KEY: misc_difference
141 <222> LOCATION: (13)..(13)
143 <223> OTHER INFORMATION: (C/T) use "y" y = cor +
147 <400> SEQUENCE: 4
148 tcacaaggtc aaGaaagatg 20
151 <210> SEQ ID NO: 5
153 <211> LENGTH: 20
155 <212> TYPE: DNA
157 <213> ORGANISM: Unknown
161 <220> FEATURE:
163 <223> OTHER INFORMATION: Human and rabbit cDNA sequences encoding the prolactin
receptor
164 were used to design the degenerate primer
166 <220> FEATURE:
168 <221> NAME/KEY: misc_difference
170 <222> LOCATION: (3)..(3)
172 <223> OTHER INFORMATION: (G/A) use "r"
176 <220> FEATURE:
178 <221> NAME/KEY: misc_difference
180 <222> LOCATION: (9)..(9)
182 <223> OTHER INFORMATION: (G/A) use "r"
186 <220> FEATURE:
188 <221> NAME/KEY: misc_difference
190 <222> LOCATION: (16)..(16)
192 <223> OTHER INFORMATION: (G/A) use "r"
196 <400> SEQUENCE: 5
197 tggagaaaga ggcaagtggt 20
200 <210> SEQ ID NO: 6
202 <211> LENGTH: 20
204 <212> TYPE: DNA
206 <213> ORGANISM: Porcine
210 <400> SEQUENCE: 6
211 cgccgcgaga atcctgtgc 20
214 <210> SEQ ID NO: 7
216 <211> LENGTH: 24
218 <212> TYPE: DNA
220 <213> ORGANISM: Porcine
224 <400> SEQUENCE: 7
225 accccacctt gtaacccatc atcc 24

```

RAW SEQUENCE LISTING

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DATE: 06/12/2003

TIME: 08:07:21

Input Set : A:\EP.txt

Output Set : N:\CRF4\06122003\I900063A.raw

228 <210> SEQ ID NO: 8
 230 <211> LENGTH: 18
 232 <212> TYPE: DNA
 234 <213> ORGANISM: Porcine
 238 <400> SEQUENCE: 8
 239 caaggtggga acatgagt 18
 242 <210> SEQ ID NO: 9
 244 <211> LENGTH: 20
 246 <212> TYPE: DNA
 248 <213> ORGANISM: Porcine
 252 <400> SEQUENCE: 9
 253 aatcctttta tttttggccc 20
 256 <210> SEQ ID NO: 10
 258 <211> LENGTH: 20
 260 <212> TYPE: DNA
 262 <213> ORGANISM: Porcine
 266 <400> SEQUENCE: 10
 267 gattattgtc tgggcagtg 20
 270 <210> SEQ ID NO: 11
 272 <211> LENGTH: 20
 274 <212> TYPE: DNA
 276 <213> ORGANISM: Porcine
 280 <400> SEQUENCE: 11
 281 aatcctttta tttttggccc 20
 284 <210> SEQ ID NO: 12
 286 <211> LENGTH: 20
 288 <212> TYPE: DNA
 290 <213> ORGANISM: Porcine
 294 <400> SEQUENCE: 12
 295 gattattgtc tgggcagtg 20
 298 <210> SEQ ID NO: 13
 300 <211> LENGTH: 23
 302 <212> TYPE: DNA
 304 <213> ORGANISM: Porcine
 308 <400> SEQUENCE: 13
 309 ctatttcaca aaaactgcgc tac 23
 312 <210> SEQ ID NO: 14
 314 <211> LENGTH: 566
 316 <212> TYPE: DNA
 318 <213> ORGANISM: Porcine
 322 <220> FEATURE:
 324 <221> NAME/KEY: misc_feature
 326 <222> LOCATION: (36)..(36)
 328 <223> OTHER INFORMATION: n = unknown at amino acid position 36
 332 <400> SEQUENCE: 14
 W--> 333 gattattgtc tgggcagtg tttttotgt ctatnaccc cactccatt catggetctc 60
 335 aggggtataat ggccaaaaaa aagacaagac aaaaatgatg gaaacctaca gataattyaa 120
 337 gcacctcaatt ttgcatttag ctgcatttag cataaaaaaa aaaaaaaaaa ctttttctca 180
 339 gtgctagaaa aaaacagaat agactcattt gaaactgac ttctctctac caaagggagt 240

? This is a nucleotide sequence.

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Input Set : A:\EP.txt

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```

341 agcgcagttg tgaatatga aacgtctgac aagaacagca aataatccca ctagtaattt 300
343 cagaatccgc ctctctcaatt agccagaatt cactgtgatg ctggcctcta taattattat 360
345 ttgtcttccac cactgatttag ttccacatca tgaaaattgc atgtcattta gtttccacrt 420
347 gcctcagaac caaccctaatt tccatacctgc catatccctg tagcagctat tcgaagatca 480
349 caaggtggga acatgtgtgta tttatctttt ctcttacatt attttagagc atgggtggcct 540
351 gcattccgggc caaaaaataa aggatt 566

```

354 <210> SEQ ID NO: 15

356 <211> LENGTH: 518

358 <212> TYPE: DNA

360 <213> ORGANISM: Porcine

364 <220> FEATURE:

366 <221> NAME/KEY: misc_feature

368 <222> LOCATION: (49)..(49)

370 <223> OTHER INFORMATION: n = unknown in amino acid position 49

374 <220> FEATURE:

376 <221> NAME/KEY: misc_feature

378 <222> LOCATION: (67)..(67)

380 <223> OTHER INFORMATION: n = unknown in amino acid position 67

384 <400> SEQUENCE: 15

W--> 385 gtacacacac acacacacac acacacacac acacacacac gtttaagcttt ctttttgaat 60

```

387 catgcttacc cgagggccac ccatagagga gtgtgtgtga ggggtccttg gcacttctga 120
389 gccctgcatc cctacaccca ctagcctcaa gatgtcatcc ctgccctggc cccaccocat 180
391 ctgcttctgt caccagcaga atggctccagt catgtgacgg acccttcatat tgactccagt 240
393 ggcttctggc tttttctagg acagtcaact ccgggaaaac ctgagatctt caaatgtcgt 300
395 tctcccga aa aggaacatt cgctgctggt tggaaagccg gggcggtatg aggacttctc 360
397 accaactaga cyctgactta ccacaaggaa gggtaagcat tcgcgtgtct cccaacaaac 420
399 cacacagagt ttctctctct gtgggccaga ggaacactgc ttctgggtta gaactgcctc 480
401 gctttggagt tcccgtaatg gctcagtggt aacgaatc 518

```

404 <210> SEQ ID NO: 16

406 <211> LENGTH: 133

408 <212> TYPE: DNA

410 <213> ORGANISM: Homo sapiens

414 <400> SEQUENCE: 16

```

415 gacagttacc tcttgaaaaa cctgagatct ttaaatgtcg ttctcccaat aaggaaacat 60
417 tcacctgtcg gtggagcctt gggacagatg gaggacttcc taccattat tcaactgactt 120
419 accacagggg agg 133

```

422 <210> SEQ ID NO: 17

424 <211> LENGTH: 53

426 <212> TYPE: PRT

428 <213> ORGANISM: Homo sapiens

432 <400> SEQUENCE: 17

434 Gly Gln Leu Pro Pro Gly Lys Pro Glu Ile Phe Lys Ser Pro Phe Cys

435 1 5 10 15

438 Arg Ser Pro Asn Lys Glu Thr Phe Thr Glu Ala Arg Pro Gly Thr Asp

439 20 25 30

442 Gly Gly Leu Pro Thr Asn Lys Pro Ala Asn Tyr Ser Leu Thr Tyr His

443 35 40 45

446 Arg Glu Gly Thr Lys

447 50

*This is a
nucleotide
sequence*

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Input Set : A:\EP.txt

Output Set: N:\CRF4\06122003\I900063A.raw

```

450 <210> SEQ ID NO: 18
452 <211> LENGTH: 132
454 <212> TYPE: DNA
456 <213> ORGANISM: Porcine
460 <400> SEQUENCE: 18
461 acagtcacct ccgggaaaac ctgagatctt caaatgtcgt tctcccgaaa aggaaacatt      60
463 cgcctgctgg tgggaagccgg gggcggatgg aggacttcct accaactaga cgetgactta      120
465 ccacaaggaa gg                                     132

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/900,063A

DATE: 06/12/2003
TIME: 08:07:22

Input Set : A:\EP.txt
Output Set: N:\CRF4\06122003\I900063A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:14; N Pos. 36
Seq#:15; N Pos. 49,67

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 13

VERIFICATION SUMMARY

PATENT APPLICATION: **US/09/900,063A**

DATE: 06/12/2003

TIME: 08:07:22

Input Set : **A:\EP.txt**

Output Set: **N:\CRF4\06122003\I900063A.raw**

L:333 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:385 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
M:341 Repeated in SeqNo=15

STATISTICS SUMMARY

PATENT APPLICATION: US/09/900,063A

DATE: 06/12/2003

TIME: 08:07:22

Input Set : A:\EP.txt

Output Set: N:\CRF4\06122003\I900063A.raw

Application Serial Number: US/09/900,063A

Alpha or Numeric or Xml: Numeric

Application Class:

Application File Date: 07-06-2001

Art Unit: 1600

Software Application: PatentIN3.1

Total Number of Sequences: 18

Total Nucleotides: 2086

Total Amino Acids: 53

Number of Errors: 0

Number of Warnings: 3

Number of Corrections: 0

MESSAGE SUMMARY

341 W: 3 ((46) "n" or "Xaa" used)